

Role of the Trauma Nurse in Massive Transfusion Protocol

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INTRODUCTION/ PURPOSE

Hemostatic resuscitation has been demonstrated to save lives, and Massive Transfusion Protocols (MTPs) are critical in the delivery of large quantities of blood and blood products in optimal ratios. The role of the trauma nurse in this process is pivotal. As MTP was adopted in other areas such as obstetrics, cardiology, and medicine, we recognized that the process runs more smoothly if managed by a consistent team. The Trauma Nurse Team Lead (TNTLs) are a dedicated group of trauma trained nurses who provide expert trauma care and were designated to act as the lead during *all* in-house MTP events. The purpose of this project was to review the outcomes since the modifications were made to our MTP process

PROJECT DESIGN

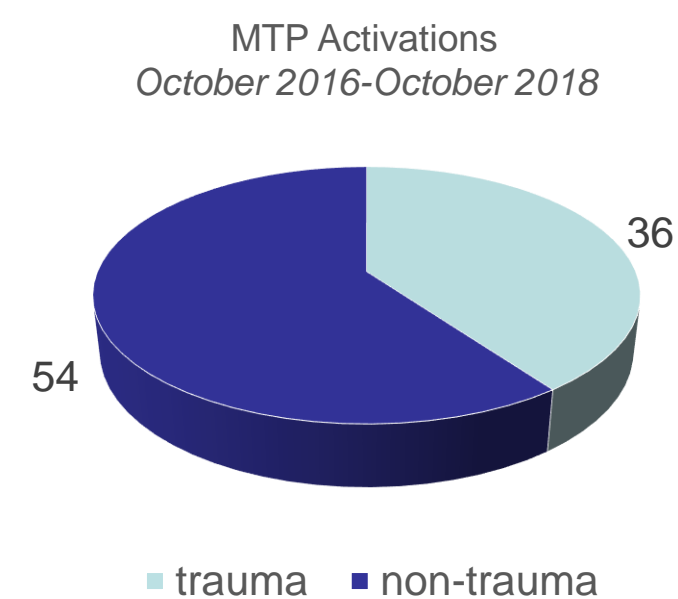
A multidisciplinary team which included the trauma surgeons, TNTLs, blood bank, and leadership from the lab, operating room (OR), anesthesiology, Emergency Department (ED), and intensive care unit (ICU) reviewed the MTP data and identified opportunities for improvement.

Modifications included:

- Designating the TNTL as the leader of the MTP
- The notification of blood bank to include a pager and alarm sounding in the blood bank for each activation and cancellation
- To facilitate more timely transfusion, a refrigerator of uncrossmatched packed red blood cells (PRBCs) was placed in the trauma room
- Wastage was decreased by the use of coolers for our MTP trays to maintain temperature and timely cancellation of MTP
- Real-time monitoring and rapid feedback to providers emphasizing any opportunities of improvement
- Education and training of all designated staff by the TNTLs

SETTING/SAMPLE

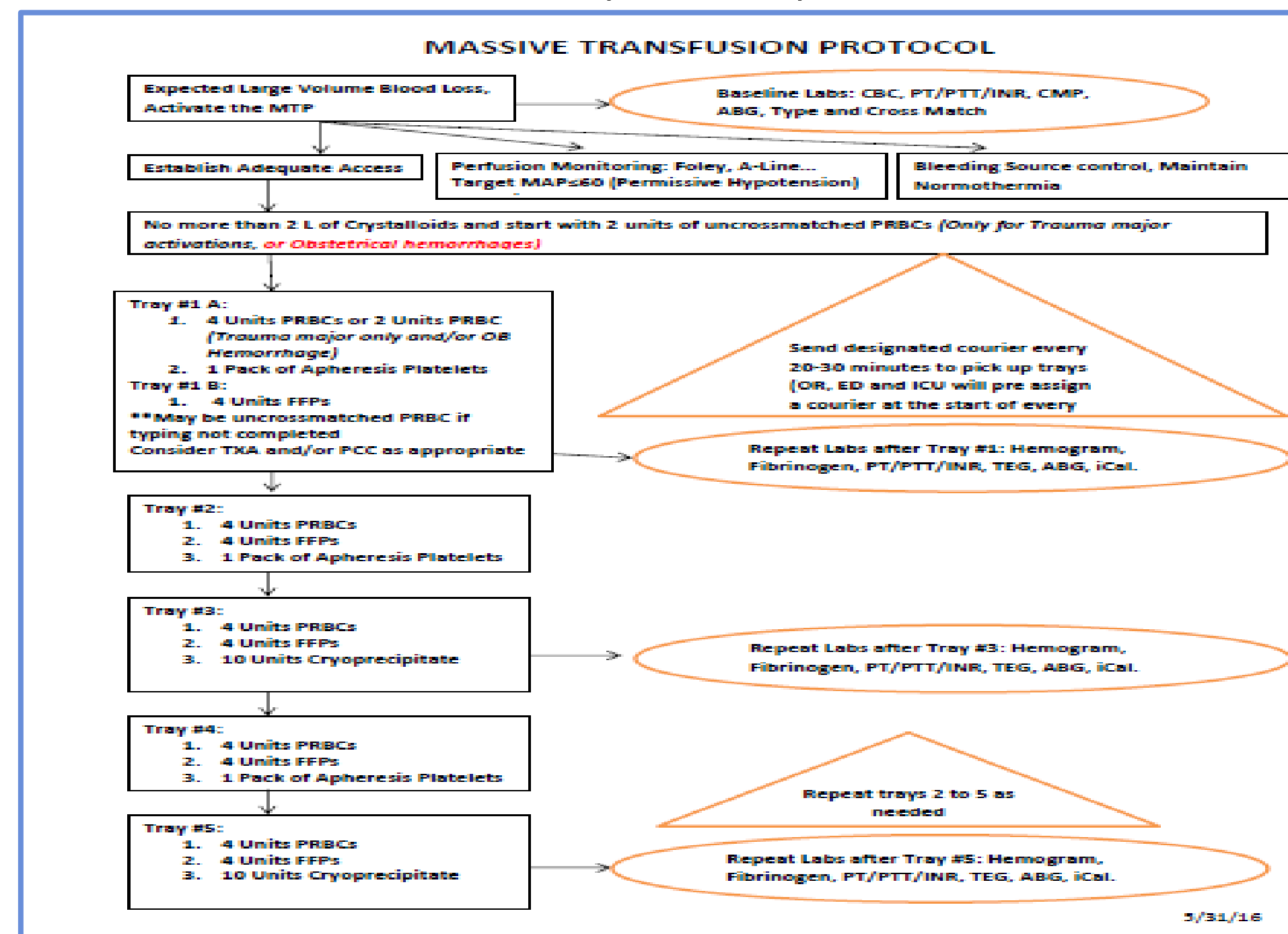
Level II Trauma Center in San Diego County.



PROCEDURES

The role of the TNTL was adapted to improve process of delivering life saving blood products to our most critical patients. In doing so, the TNTL is able to:

- Help to identify need for initiating MTP
- Activate "MTP" by contacting hospital code line
- Designate roles including: runner (for labs/blood products, scribe, primary infusion RN, 2nd RN for verifying blood products
- Initiation and delivery of products
- Track products received keeping PRBC's, Plasma, Platelets, Cryoprecipitate in ratio
- Real time feedback to trauma surgeon or other physician with regard to products infused, lab results, etc.
- Termination of MTP
- Involvement in case reviews and process improvement



CONCLUSIONS

- The MTP process, like any clinical process, benefits from continuous performance improvement
- The TNTL is uniquely qualified to lead MTP activations, and can serve as a resource for the entire institution
- By having a consistent team involved in MTP, we have improved the process in terms of timeliness, appropriate ratios of products, and lower wastage

RESULTS

Since the modifications we achieved the following:

- Front line providers are clear on their roles and responsibilities

